

1 **TRANSFERRING SCHEDULING DATA FROM A PLURALITY OF DISK STORAGE**  
2 **DEVICES TO A NETWORK SWITCH BEFORE TRANSFERRING DATA**  
3 **ASSOCIATED WITH SCHEDULED REQUESTS BETWEEN THE NETWORK**  
4 **SWITCH AND A PLURALITY OF HOST INITIATORS**

## **ABSTRACT OF THE DISCLOSURE**

7 A network switch is disclosed for resolving requests from a plurality of host initiators by  
8 scheduling access to a plurality of disk storage devices. The network switch comprises a  
9 switched fabric comprising a plurality of switching elements. Each switching element comprises  
10 a plurality of bi-directional switched fabric ports, and a control input connected to receive switch  
11 control data for selectively configuring the switching element in order to interconnect the bi-  
12 directional switched fabric ports. The network switch further comprises a memory for storing a  
13 routing and scheduling program, and a microprocessor, responsive to the requests, for executing  
14 the steps of the routing and scheduling program to generate the switch control data to transmit  
15 scheduled requests through the bi-directional switched fabric ports. At least one of the plurality  
16 of switching elements comprises a disk storage interface for connecting to a selected one of the  
17 disk storage devices. The microprocessor schedules access to the plurality of disk storage  
18 devices through the disk storage interface. The disk storage interface receives scheduling data  
19 from the selected one of the storage devices, and the memory stores the scheduling data received  
20 via the bi-directional switched fabric ports of a selected number of the switching elements. The  
21 scheduling data is processed according to a priority such that the selected switching elements  
22 transfer the scheduling data through the bi-directional switched fabric ports before transferring  
23 data associated with the scheduled requests.